

WETLAND DELINEATION PROCEDURES AND MITIGATION, TREE REPLACEMENT, ENDANGER SPECIES, AND PERMIT INFORMATION

Any proposed construction activity which will affect wetlands must be specifically addressed. Executive Order 11990 issued by the President and Section 4(f) of the DOT Act of 1966, are intended to avoid the long and short term adverse impacts associated with the modification or destruction of natural wetlands. This consideration also applies to grading projects being done without federal aid, but with future plans to pave with federal aid. To comply with these regulations, a review is conducted of the proposed project to determine if there will be any adverse impact to Wetlands, Endangered Species, or Trees.

To determine what, if any, impact will result from the proposed project, a review may have to be conducted. This outline is prepared to assist this process.

Wetlands review

- The wetlands Review process begins when the respective project is placed on the milestone schedule.
 - The Designer reviews the project with the Engineering and Environmental Section (EES) of the Design Division to determine if a wetland review is needed.
 - If the proposed work on the project deals only with the existing roadway surface, a wetlands review is not needed.
 - During the preparation of the Project Concept Report (PCR), the EES will get the project limits from the PCR writer and delineate the wetlands on the project.
 - EES will delineate the physical limits of the wetlands using the 1987 Corps of Engineers Wetland Delineation Manual.
- Many of the wetlands the NDDOT impacts in projects are wetlands that are contained within our current right of way, and are the result of our ditches not draining properly as they were intended to do. These wetlands that are the result of highway construction are wetlands that are “artificially created.” Because these wetlands the Department has created are artificial, and not natural, EO 11990 does not apply and the Department will not mitigate for impacts to artificially created wetlands.

The following criteria will be used by the Department to identify created wetlands within existing NDDOT right-of-way:

1. Backslope – If there is a backslope and a portion of the wetland basin does not extend outside of the highway right-of-way there is a very high probability that the entire ditch has been manipulated and any wetland found in the ditch at such a location will be identified as an artificially created wetland. Wetland basins in the road right-of-way where the ditch does not have a backslope are likely naturally

occurring prairie pothole wetlands. If these basins are affected by highway construction activities mitigation is required.

2. Original Plans – The original highway construction plans typically identified the larger natural wetlands and contain flow arrows that indicate the direction a ditch was intended to drain. Current wetlands located entirely in the ditches that are not identified on the original plans and were indicated to drain by the original plans will be identified as artificially created wetlands.
3. Landscape – If a wetland is entirely in the right-of-way, appears to be constructed and is not part of an adjacent natural wetland outside of the right of way, it will be identified as artificially created.
4. National Wetlands Inventory Maps – If the wetland type listed on the NWI maps ends with an “x”, the wetland is excavated. If the wetland is excavated and inside the existing NDDOT right-of-way the wetland may be identified as artificially created. Artificially created or excavated wetlands in the highway right-of-way are typically linear wetlands. Created wetlands in the highway right-of-way may be designated as temporary (PEMAx) or seasonal (PEMCx) wetlands on the NWI maps.

The person making the identification of artificially created wetlands will use as many of the four criteria that are listed above as they have available to them. The guidance given in the Design Manual or by Design Memorandum provides criteria that will followed to determine the type of delineation (field vs. office) that will be conducted.

This memo does not apply to USACE jurisdictional wetlands. If USACE determines that an artificially created wetland is jurisdictional, NDDOT may be required to mitigate for impacts.

This memo does not apply to artificially created wetlands that were intentionally created as wetland mitigation. If a created wetland was created for mitigation purposes, impacts to that wetland will need to be mitigated.

Comment: From Design Memo 10-2005

- EES will work with the project designer to determine how the proposed design will impact wetlands and will review the final design to determine the definitive impact on wetlands.
- EES should conduct a field review of the project to view the identified wetlands impact. Along with the field review they should review National Wildlife Inventory (NWI) maps and conduct a literature search of information that is available on wetlands in the vicinity of the proposed project.

- It should be noted that if the scope of the project changes subsequent to the review, the wetlands impacts must be addressed again.

When it has been determined that there will be wetland impacts, EES will need to identify where and how these impacts are to be mitigated. Mitigation of wetlands for Federally Funded projects is governed by 23 CFR Part 777.

Mitigation of Impact

- The first consideration should be an attempt to mitigate the impacts within the highway right of way.
- When it is not practicable to mitigate within the right of way, it is necessary to mitigate off site.
- EES works with private landowners to negotiate perpetual easements of restored wetlands or the creation of new wetlands in pit areas. They negotiate with the landowners to purchase wetland credits.
- Wetland Banking is a concept that was established to hold excess wetland mitigation acres to draw upon for future projects where there are wetland impacts. EES is responsible for:
 - Establishing and monitoring the Wetland Banking program which is a process of mitigating impacted wetland acres on a one-to-one basis.
 - Works with landowners to negotiate for Permanent Wetland Easements.
 - Developing a document (generally an easement) for each bank that is established.
 - Keep a record of wetland impacts for the Wetland Mitigation Banking Review Team.
 - Monitor wetland banking sites to ensure the site is functioning properly.
 - Providing sufficient justification to Federal Highway to spend federal funds on banks and mitigation projects.

The Mitigation Banking Review Team approves the use of banked acres and has the following representation:

Corps of Engineers
U.S. Fish and Wildlife Service
State Game and Fish
National Resource Conservation Service
Federal Highway Administration
North Dakota Department of Transportation

There are a number of agencies involved with wetland impacts and they are listed as follows along with their role:

Federal Highway Administration

1. Approves the Project Concept Report which includes the wetland review.
2. Approves the use of federal funds for wetland banking. If these funds are used permanent easements must be acquired. Credits in the bank cannot be sold to outside entities if Federal funds are used on the project.

Corps of Engineers

NDDOT applies to the Corps for a 404 permit so the Corps can see that the project will not impact any endangered plant or animal species. No work can proceed on the wetlands until the 404 permit has been issued by the Corps. In fact the project would probably not be bid if the 404 has not been approved.

A 404 permit is required when constructing mitigation projects.

North Dakota Department of Health

NDDOT applies to the Health Department for a 401 Water Quality Permit to assure the water quality will not be affected by the project. A 401 water quality certificate is issued through the 404 permit; it is not applied for separately.

U.S. Fish and Wildlife Service (FWS)

NDDOT works with this agency in mitigating impacts to wetlands.

Signed Memorandum of Understanding to set up Wetland Banks to mitigate impacts to Wetland Easements owned by FWS.

FWS is a member of the mitigation banking review team.

Comments on projects through 404 process and solicitation of views on projects.

NDDOT

1. **The Right of Way Section** of the Design Division helps to prepare the Perpetual Easements for wetland credits that have been procured from private landowners.

These documents are filed with the respective County Register of Deeds Office.

2. **The Local Government Division** has the responsibility for ensuring that local agencies comply with the Rules and Regulations pertaining to wetlands when using Federal Funds for their local projects.

They ensure that the local project sponsor contacts public and private agencies that may potentially have wetland impacts.

The Local Government Agency conducts a field review to quantify the wetlands impact and to develop a plan to mitigate the impact.

3. **The Districts** send information to the Design Division, regarding projects being done in the District, to determine if there are any wetland impacts. If there are, the district will incorporate the mitigation in the plans.

There are times when the Districts may construct wetland sites.

The Districts have the responsibility to see that the wetland sites remain in compliance

4. **The Design Division** should do a cultural resource inventory on all mitigation projects and submit to the Corps as part of the 404 permit.

Design provides the Districts with copies of wetland site agreements.

U.S. Fish and Wildlife Service Wetland Easements

If a project impacts wetlands owned by this agency, we must go through the 4(f) process pursuant to 23 CFR Part 771.135 which requires the DOT to:

- Demonstrate there is no prudent or feasible alternative to the use of the land.
- To take the necessary mitigation steps to off-set the impacts.
- The DOT has established a Wetlands Bank for mitigating impacts to these easement wetlands. This is based on a Memorandum of Understanding dated 1975 and revised in 1993.

Endangered Species

This involves animal and plant species and the Design Division is responsible for coordinating the impacts in this area as follows:

- Coordinates with the U.S. Fish and Wildlife Service (FWS) to determine if the project will impact endangered species and what action to take.
- Is responsible for ensuring compliance with the Migratory Bird Species Treaty Act.
- Develops contracts with the FWS to take into consideration the impacts to Endangered Species. For example, the DOT has contracted with FWS on a pallid sturgeon study to determine their populations in the Yellowstone River as a result of

a bridge project-considered a Section 7 consultation through the Endangered Species Act.

- The State Game and Fish monitors what happens to State Endangered Species and they determine time frames for establishing construction schedules to avoid spawning periods for fish.
- The Forest Service conducts special studies, on properties they own, to determine the impact on endangered or sensitive plant species.

Trees

The Design Division is responsible for determining if trees will be impacted by the project. If they are, they need to be replaced through the NEPA process. Trees are replaced on a 2:1 basis. We currently have two tree banks for mitigation - one in Richland County (Hamilton Wills WMA) and one at Noonan.

- The Design Division works with the State Game and Fish and private landowners to develop contracts and easements for planting trees.
- Design works with the Soil Conservation Districts to get the trees planted.
- If the trees are on private land, Design will contract with the Soil Conservation District to maintain the plantings.
- If the plantings are on property owned by the State Game and Fish, they will maintain the plantings.